

#### 4.5.3.1 Compliance Demonstration

To ensure reasonable compliance with the visible emissions rule, Facility-wide Permit Condition 1.8 requires the permittee to conduct routine visible emissions inspections of the facility. The permittee is required to inspect potential sources during daylight hours and under normal operating conditions. If any visible emissions are present from any point of emission covered by this condition, the permittee must take appropriate corrective action as expeditiously as practicable. If opacity is determined to be greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee must take corrective action and report the exceedance in its annual compliance certification and in accordance with the excess emissions rules in IDAPA 58.01.01.130-136. The permittee is also required to maintain records of the results of each visible emissions inspection, which must include the date of each inspection, a description of the permittee's assessment of the conditions existing at the time visible emissions are present, any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Should an emission unit have a specific compliance demonstration method for visible emissions that differs from Facility-wide Permit Condition 1.8, then the specific compliance demonstration method overrides the requirement of Facility-wide Permit Condition 1.8. Facility-wide Permit Condition 1.8 is intended for small sources that would generally not have any visible emissions.

Facility-wide Permit Condition 1.8 requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes taking corrective action within 24 hours of discovering visible emissions meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

#### 4.5.4 **Startup, Shutdown, Scheduled Maintenance, Safety Measures, Upset and Breakdown- IDAPA 58.01.01.130-136**

Facility-wide Permit Condition 1.9 requires that the permittee comply with the requirements of IDAPA 58.01.01.130-136 for startup, shutdown, scheduled maintenance, safety measures, upset, and breakdowns. This section is fairly self explanatory and no additional detail is necessary in this technical analysis. However, it should be noted that subsections 133.02, 133.03, 134.04, and 134.05 are not specifically included in the permit as applicable requirements. These provisions only apply if the permittee anticipates requesting consideration under subsection 131.02 to allow DEQ to determine if an enforcement action to impose penalties is warranted. Section 131.01 states: *"The owner or operator of a facility or emissions unit generating excess emissions shall comply with Sections 131, 132, 133.01, 134.01, 134.02, 134.03, 135, and 136, as applicable. If the owner or operator anticipates requesting consideration under Subsection 131.02, then the owner or operator shall also comply with the applicable provisions of Subsections 133.02, 133.03, 134.04, and 134.05."* Failure to prepare or file procedures pursuant to Sections 133.02 and 134.04 is not a violation of the Rules in and of itself, as stated in subsections 133.03.a and 134.06.b. Therefore, since the permittee has the option to follow the procedures in Subsections 133.02, 133.03, 134.04, and 134.05, and is not compelled to, the subsections are not considered applicable requirements for the purpose of this permit and are not included as such.

#### 4.5.4.1 Compliance Demonstration

The compliance demonstration is contained within the text of Facility-wide Permit Condition 1.9. No further clarification is necessary here.

### 5. **EMISSION UNITS**

The permit is structured to include 14 emissions units that have specific applicable requirements from previous PTCs. Each operation consists of one or more emissions units that have been grouped together due to similar functions and/or similar applicable requirements. In addition, one emission unit group covers miscellaneous processes subject to the process weight limits of IDAPA 58.01.01.702 or 703.

Finally, an emission unit group covers all the sources subject to the Pulp and Paper MACT (40 CFR Part 63, Subpart S).

The emissions unit groups are listed in the permit as follows:

- Emission Unit Group 1 – Power boilers Nos. 1, 2, and 3
- Emission Unit Group 2 – Power boiler No. 4
- Emission Unit Group 3 – Temporary Boilers (2)
- Emission Unit Group 4 – No. 4 Recovery Furnace and No. 4 Smelt Dissolving Tank
- Emission Unit Group 5 – No. 4 Recovery Furnace
- Emission Unit Group 6 – No. 5 Smelter Dissolving Tank
- Emission Unit Group 7 – No. 4 and No. 5 recovery boiler salt cake Systems
- Emission Unit Group 8 – Lime Kilns No. 3 and No. 4
- Emission Unit Group 9 – Lime kiln 2
- Emission Unit Group 10 – Lime Handling and Slaking
- Emission Unit Group 11 – NCG Incinerator
- Emission Unit Group 12 – Oxygen Delignification Reactor
- Emission Unit Group 13 – Chlorine Dioxide Plant
- Emission Unit Group 14 – Trash hog
- Emission Unit Group 15 – Miscellaneous Process Sources
- Emission Unit Group 16 – Sources Subject to 40 CFR Part 63, Subpart S

#### 5.1 EMISSION UNIT GROUP 1 – POWER BOILERS Nos. 1, 2, AND 3

The power boilers produce steam to run mill processes and operate the turbine generators. The turbine generators produce co-generated electricity and reduce the steam pressure for use in mill processes. Emissions Unit Group 1 consists of the following systems, emission units, and related emission control equipment:

**Table 5.1A Boiler Description and Emission Control Devices**

Emission Point ID	Emissions Unit(s)/Process(es)	Emission Control Device
240 and 253	Power boilers Nos. 1 and 2, oil-or natural gas-fired	None
254	Power boiler No. 3, natural gas-fired	None

The following stack parameters were provided in the application:

**Table 5.1B Power boilers Nos. 1, 2, and 3 Stack Parameters**

Stack ID	240	253	254
Stack height (ft)	83	83	73
Stack diameter (ft)	10	10	10
Flow rate (acfm)	120,000	120,000	120,000
Temperature (°F)	350	350	350

##### 5.1.1 Permit Requirement – Particulate Matter from Fuel Combustion (IDAPA 58.01.01.701,702)

IDAPA 58.01.01.677 states that "...a person shall not discharge to the atmosphere from any fuel burning equipment in operation prior to October 1, 1979, PM in excess of the concentrations shown in the following table:

Fuel Type	Allowable Particulate Emissions	Percent Oxygen (O <sub>2</sub> )
Gas	0.015 gr/dscf	3%
Oil	0.050 gr/dscf	3%

*The effluent gas shall be corrected to the oxygen concentration shown."*

#### 5.1.1.1 Compliance Demonstration Method

EPA guidance on periodic monitoring states: "...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device." The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall conduct periodic inspections of visible emissions from this equipment. Continuous compliance may be established by visible emissions tests and by proper operation of the boilers. In other words, if the equipment is properly operated, the grain-loading emissions limitation will not be exceeded.

#### 5.1.1.2 Monitoring

For each boiler that burns oil more than 100 hours in a calendar quarter, the permittee shall conduct quarterly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs. No monitoring is required if only gas is burned due to the low likelihood of an emission limit violation.

#### 5.1.1.3 Testing

There is no testing required to satisfy the PM requirement.

#### 5.1.1.4 Recordkeeping

The results of each observation shall be recorded and maintained as required in Permit Condition 1.11 and shall include, but not limited to, the following information:

- Date of observation
- Time of observation
- Equipment/emission point observed
- Weather conditions during observation
- Results of visible emissions observations

#### 5.1.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.1.2 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)

The visible emissions limitations in IDAPA 58.01.01.625 state: "...a person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625."

#### 5.1.2.1 Compliance Demonstration Method

An observer shall conduct inspections of visible emissions as described below.

#### 5.1.2.2 Monitoring

For each boiler that burns oil more than 100 hours in a calendar quarter, the permittee shall conduct quarterly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs. No monitoring is required if only gas is burned due to the low likelihood of a violation of the emission limit.

#### 5.1.2.3 Testing

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

#### 5.1.2.4 Recordkeeping

The permittee will record the results of the observer's inspection of the power boiler stacks and provide documentation in records according to the content and format listed below:

- Date of observation
- Time of observation
- Equipment / emission point observed
- Results of visible emissions tests

The permittee must record the results of each visible emissions evaluation performed according to the standard requirements for recordkeeping of monitoring information. The record must be maintained in accordance with Permit Condition 1.11.

#### 5.1.2.5 Reporting\*

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report.

#### 5.1.3 **Permit Requirement (Facility-wide) – Sulfur in Fuel (IDAPA 58.01.01.727 and 728)**

IDAPA 58.01.01.727 and 728 state that *"no person shall sell, distribute, use or make available for use, any fuel oil containing more than the following percentages of sulfur:*

- *ASTM Grade 1. ASTM Grade 1 fuel oil – 0.3% by weight.*
- *ASTM Grade 2. ASTM Grade 2 fuel oil – 0.5% by weight.*
- *Residual Oil – 1.75% by weight."*

#### 5.1.3.1 Compliance Demonstration Method

Compliance shall be demonstrated by keeping records of fuel supplier certificates.

#### 5.1.3.2 Monitoring and Testing

There are no monitoring or testing requirements associated with this requirement.

#### 5.1.3.3 Recordkeeping

The permittee shall keep records of the sulfur content of each fuel oil delivery as provided by the fuel oil supplier.

#### 5.1.3.4 Reporting

Any deviations from the required fuel sulfur limits shall be included in the semiannual report.

#### 5.1.4 **Permit Requirement – Steaming Rate (PTC No. 069-00001, 8/31/01)**

PTC No. 069-00001 dated August 31, 2001 requires that the steaming rate for the 170-psig steam header to the two thermocompressors shall not exceed 55.8 million pounds of steam per month.

##### 5.1.4.1 Compliance Demonstration Method

Compliance shall be demonstrated by monitoring and recordkeeping as described below.

##### 5.1.4.2 Monitoring and Recordkeeping

Each month, the permittee shall continuously monitor and record the steaming rate from the 170-psig steam header to the two thermocompressors in pounds per hour. The monitoring unit shall provide 95% data capture on a monthly basis or alternate data capture as provided by DEQ. A compilation of the most recent five years of data shall be kept onsite and shall be made available to DEQ representatives upon request.

The permittee shall record the steaming rate based on a monthly average of all steaming rate measurements taken during each monthly period. A compilation of the most recent five years of data shall be kept onsite and shall be made available to DEQ representatives upon request.

##### 5.1.4.3 Testing

There is no testing associated with this requirement.

##### 5.1.4.4 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

## 5.2 **EMISSION UNIT GROUP 2 – POWER BOILER No. 4**

The purpose of power boiler 4 is the same as for the boilers in Emission Unit Group 1.

Table 5.2A describes the control devices used in controlling emissions from the sources regulated in this permit.

**Table 5.2A      Boiler Description and Emission Control Devices**

<b>Emission Point ID</b>	<b>Emissions Units(s)/Process(es)</b>	<b>Emission Control Device</b>
781	Combustion engineering boiler burning wood waste, oil, natural gas, and other waste materials; installed in 1980	Electrostatic precipitator

The following stack parameters were provided in the application:

**Table 5.2B Power boiler No. 4 Stack Parameters**

Stack ID	781
Stack height (ft)	300
Stack diameter (ft)	13.5
Flow rate (sdcfm)	370,000
Temperature (°F)	410

#### **5.2.1 Permit Requirement – PM Emission Limit [40 CFR 60.42(a)(1)]**

The NSPS for fossil fuel-fired steam generating units (40 CFR 40, Subpart D) states that a person shall not discharge to the atmosphere any gases which contain PM in excess of 0.10 lb/MMBtu derived from fossil fuel or fossil fuel and wood residue.

##### **5.2.1.1 Compliance Demonstration Method**

EPA guidance on periodic monitoring states: *"...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device."* The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall install a COMS on the boiler stack as required by 40 CFR 60.45(a). The permittee shall conduct periodic source tests as discussed in Section 5.2.1.3. An O&M manual shall also be developed and followed for the boiler and control equipment.

##### **5.2.1.2 Monitoring**

The permittee shall install, calibrate, operate, and maintain a COMS on the boiler stack.

##### **5.2.1.3 Testing**

While combusting wood products, the permittee shall conduct a PM performance test at maximum desired operating capacity in accordance with the procedures outlined in 40 CFR Part 60, Appendix A, Method 5; or a DEQ-approved alternative method as provided in this emission limit. The test shall be performed during the first three months of the permit term or one year from the last test, whichever is later, to demonstrate compliance with Permit Condition 3.1. The permittee shall monitor and record the steam production rate of the boiler during each test.

If the particulate emissions measured in the initial performance test are less than or equal to 75% of the emissions standard, no further testing shall be required during the life of the permit. If the particulate emissions measured during the performance test are greater than 75%, but less than or equal to 90% of the emissions standard, a second test shall be required in the third year of the permit term. If the particulate emissions measured during the performance test are greater than 90% of the emissions standard, the permittee shall conduct a performance test annually.

The permittee shall submit a performance test protocol to DEQ within 30 days of conducting any performance test required by this permit as specified in Permit Condition 1.16. The performance test protocol shall address the required averaging period specified in IDAPA 58.01.01.679, the altitude correction in IDAPA 58.01.01.680, and the process monitoring procedures to be recorded during the duration of the performance test.

#### 5.2.1.4 Recordkeeping

The permittee shall develop and keep on file an O&M manual for the pollution control equipment that incorporates manufacturer O&M procedures. The manual shall be updated as necessary and include, at a minimum, the following:

- Normal operating conditions, parameters, and procedures
- Startup, shutdown, and malfunction procedure
- Guidelines for normal maintenance schedules and procedures

#### 5.2.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.2.2 **Permit Requirement - Opacity [40 CFR 60.42(a)(2)]**

The NSPS for fossil fuel-fired steam generating units states that a person shall not discharge to the atmosphere any gases which exhibit greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.

##### 5.2.2.1 Compliance Demonstration Method

EPA guidance on periodic monitoring states: *"...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device."* The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall install a COMS on the boiler stack as required by 40 CFR 60.45(a).

##### 5.2.2.2 Monitoring

The permittee shall install, calibrate, operate, and maintain a COMS on the boiler stack.

##### 5.2.2.3 Testing

There is no testing required to satisfy the opacity requirement.

##### 5.2.2.4 Recordkeeping

The permittee shall comply with the recordkeeping requirements of 40 CFR 60.7(b) and (e), except that the records shall be retained for at least five years from the date of the record.

##### 5.2.2.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

### **5.2.3 Permit Requirement – SO<sub>2</sub> Emission Limits [40 CFR 60.43]**

40 CFR 60.43(a)(1) and (b) require that a person shall not discharge to the atmosphere any gases which contain SO<sub>2</sub> in excess of 0.80 lb/MMBtu derived from liquid fossil fuel or liquid fossil fuel and wood residue.

#### **5.2.3.1 Compliance Demonstration Method**

The permittee shall demonstrate compliance by maintaining records of fuel sulfur content and the SO<sub>2</sub> emission rate as described below.

#### **5.2.3.2 Operating Requirement**

The boiler fuel may include wastepaper, cafeteria waste, straw, tire chips (shredded motor vehicle tires), clarifier sludge, creosote-treated railroad ties, municipal waste paper, turpentine up to 3,500 gal/mo, on-specification used oil generated onsite and meeting the requirements of 40 CFR 279, and plastic drool (waste from extruding machines), in any combination of the above up to 20% of the total fuel rate on a dry basis. However, the total sulfur in the fuel mixture shall not exceed 0.5% dry basis.

#### **5.2.3.3 Monitoring and Recordkeeping**

The permittee shall maintain records of the sulfur content of each shipment of oil to be used in the boiler based on fuel supplier certifications. Each month, the permittee shall calculate the maximum SO<sub>2</sub> emission rate for the month in lb/MMBtu.

#### **5.2.3.4 Testing**

There is no testing required for this emission limit.

#### **5.2.3.5 Reporting**

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

### **5.2.4 Permit Requirement – NO<sub>x</sub> Emission Limits [EPA PSD Approval, 9/30/80]**

Condition 1 of the EPA's prevention of significant deterioration (PSD) approval (PSD-X80-18) dated September 30, 1980, requires that the permittee shall not discharge to the atmosphere any gases from power boiler No. 4, which contain NO<sub>x</sub> in excess of 0.20 lb/MMBtu derived from gaseous fossil fuel alone or combination with wood waste and 0.30 lb/MMBtu derived from liquid fossil fuel or liquid fossil fuel and wood residue. The NO<sub>x</sub> emissions shall not exceed 842 T/yr.

#### **5.2.4.1 Compliance Demonstration Method**

Compliance shall be demonstrated by continuous emission monitoring.

#### **5.2.4.2 Monitoring**

The permittee shall install, calibrate, maintain, and operate a CEMS for NO<sub>x</sub> on the boiler stack.

#### **5.2.4.3 Testing**

There is no testing required to satisfy the NO<sub>x</sub> limits.



#### 5.2.4.4 Recordkeeping

Each month, to determine compliance with the ton-per-year emission limit, the permittee shall calculate each month the monthly emissions and annual emissions for the previous 12-month period.

#### 5.2.4.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

### 5.3 **TEMPORARY BOILERS**

Emission Unit Group 4 consists of two package natural gas-fired boilers less than 100 MMBtu/hr brought in on a temporary basis to generate steam during the IPPD annual maintenance outage.

No manufacturer, capacity, or stack parameter information was provided in the application.

#### 5.3.1 **Permit Requirement – PM from Fuel-burning Equipment – (IDAPA 58.01.01.676) 5.5.2 Permit Requirement - Visible Emissions - [IDAPA 58.01.01.625]**

IDAPA 58.01.01.676 states: "a person shall not discharge to the atmosphere from any fuel-burning equipment with a maximum rated input of 10 million Btu's per hour, or more, and commencing operation on or after October 1, 1979, PM in excess of the concentrations shown in the following table:

Fuel type	Allowable Particulate Emissions	Percent oxygen
Gas	0.015 gr/dscf	3%

*The effluent gas shall be corrected to the oxygen concentration shown."*

#### 5.3.1.1 Compliance Demonstration Method

EPA guidance on periodic monitoring states: "...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device." The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The uncontrolled emission factor is less than this limit. Therefore, no additional compliance demonstration is necessary.

#### 5.3.1.2 Monitoring, Testing, Recording, and Reporting

There is no monitoring, testing, recordkeeping, or reporting required to ensure compliance with this PM requirement.

#### 5.3.2 **Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)**

The visible emissions limitations in IDAPA 58.01.01.625 state that: "a person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625."

#### 5.3.2.1 Compliance Demonstration Method

Since a natural gas-fired boiler would rarely, if ever, have any visible emission, no compliance demonstration is considered necessary.

#### 5.3.2.2 Monitoring, Testing, Recordkeeping and Reporting

There is no monitoring, testing, recordkeeping, or reporting required to ensure compliance with this requirement.

#### 5.3.3 Permit Requirement – NSPS – Subpart Dc

The temporary boilers are subject to 40 CFR Part 60, Subpart Dc if constructed after June 9, 1989, and the maximum heat input capacity is between 10 and 100 MMBtu/hr. If the first use of a temporary boiler is at the Potlatch facility, the initial notification requirements of Part 60.48c(a) are applicable. The only other applicable requirement for a natural gas-fired boiler is the fuel consumption recordkeeping of 60.48c(g).

#### 5.3.3.1 Compliance Demonstration Method

The permittee shall keep records of daily fuel consumption as required by 60.48c(g).

#### 5.3.3.2 Monitoring and Testing or Reporting

There are no monitoring or testing requirements.

#### 5.3.3.3 Recordkeeping

The permittee shall keep records of daily fuel consumption, which shall be retained for a period of at least five years. The five-year retention period of IDAPA 58.01.01.322.07.c. supersedes the two-year period specified by 60.48c(i).

#### 5.3.3.4 Reporting

If the first use of the temporary boiler is at the Potlatch facility, the permittee shall comply with the initial notification requirements of 40 CFR 60.48c(a).

### 5.4 **EMISSION UNIT GROUP 4 – NO. 4 RECOVERY FURNACE AND NO. 4 SMELT DISSOLVING TANK**

Emissions Unit Group 4 consists of the following systems, emission units, and related emission control equipment:

Table 5.1A Emission Unit Description and Emission Control Devices

Emission Point ID	Emissions Unit(s)/Process(es)	Emission Control Device
189	Babcock & Wilcox recovery furnace, started up November, 1970	Electrostatic Precipitator
157	Research Cottrell smelt-dissolving tank, started up November, 1970	High efficiency wet scrubber

The following stack parameters were provided in the application:

**Table 5.1B Stack Parameters**

Stack ID	189	157
Stack height (ft)	325	215
Stack diameter (ft)	9	3
Flow rate (acfm)	118,500	17,000
Temperature (°F)	350	160

#### **5.4.1 Permit Requirement – Recovery Furnace PM Emission Limits (PTO No. No. 1140-0001; 8/22/84)**

PTO No. No. 1140-0001, dated August 22, 1984, requires that PM emissions from the recovery furnace shall not exceed 0.040 gr/dscf at 8% oxygen nor 2 lb/T of ADP. It should be noted that the NESHAP for combustion sources at kraft pulp mills (40 CFR 63, Subpart MM), which is effective for existing sources on March 13, 2004, limits PM emissions from kraft recovery furnaces to 0.044 gr/dscf at 8% oxygen. Since the permit limit is more stringent, the NESHAP limit is not included as a separate permit condition. However, the Subpart MM testing, monitoring, recordkeeping, and reporting requirements for recovery furnaces will become effective on March 13, 2004, as specified below. Also, IDAPA 58.01.01.821 limits PM emissions to 4 lb/T of ADP. Again, the permit is more stringent and the state rule is not included as a separate permit condition.

##### **5.4.1.1 Compliance Demonstration Method**

EPA guidance on periodic monitoring states: *"...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device."* The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall conduct periodic PM source tests on the recovery furnace as described below. The permittee shall continuously monitor and record the opacity on the recovery boiler stack.

An O&M manual shall be developed to include, at a minimum, a general description of the equipment; normal operating conditions and procedures; startup, shutdown, and maintenance procedures; upset conditions guidelines; and the corrective action procedures.

After March 13, 2004, the permittee shall comply with the applicable monitoring, testing, recordkeeping, and reporting requirements in 40 CFR 63.864 to 63.867.

##### **5.4.1.2 Monitoring**

The permittee shall continuously monitor the opacity on the recovery furnace stack.

##### **5.4.1.3 Testing**

The permittee shall conduct a PM performance test on each source at the maximum expected production rate in accordance with the procedures in 40 CFR Part 60, Appendix A, Method 5. The tests shall be conducted during the first three months of the permit term to demonstrate compliance with Permit Conditions 5.1 and 5.3. If the emissions measured in the initial test are less than 50% of the emission limit, no further testing shall be required during the life of the permit. If the emissions measured in the initial test are between 50% and 80% of the standard, a second test shall be required in the third year of the permit term. If the initial test exceeds 80% of the standard, an annual test shall be required.

#### 5.4.1.4 Recordkeeping

Opacity from the recovery furnace shall be continuously recorded. Records of each source test shall be maintained in accordance with Permit Condition 1.11.

#### 5.4.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.4.2 **Permit Requirement – Recovery Furnace TRS Emission Limits - (PTO No. 1140-0001, 8/22/84)**

PTO No. 1140-0001, dated August 22, 1984, requires that TRS from the recovery furnace shall not exceed 15 ppm nor 0.5 pounds of sulfur per ton of ADP. Note, IDAPA 58.01.01.819 limits recovery furnace TRS emissions to 0.5 lb sulfur per ton of ADP or 17.5 ppm as H<sub>2</sub>S on a dry basis, whichever is more stringent. Since the permit is at least as stringent as the state rule, the state rule is not included as a separate permit condition.

#### 5.4.2.1 Compliance Demonstration Method

EPA guidance on periodic monitoring states: *"...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device."* The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall continuously monitor and record TRS emissions. An O&M manual shall be developed to include, at a minimum, a general description of the equipment; normal operating conditions and procedures; startup, shutdown, and maintenance procedures; upset conditions guidelines; and the corrective action procedures.

#### 5.4.2.2 Monitoring

The permittee shall continuously monitor TRS from the recovery boiler stack.

#### 5.4.2.3 Testing

There is no testing for this requirement.

#### 5.4.2.4 Recordkeeping

Records of continuous TRS monitoring in units consistent with the emission limits shall be maintained in accordance with Permit Condition 1.11.

#### 5.4.2.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.4.3 **Permit Requirement – PM Emissions from Smelt Dissolving Tank (PTO No. 1140-0001, 8/22/84)**

PTO No. 1140-0001, dated August 22, 1984, requires that PM emissions from the smelt-dissolving tank shall not exceed 0.070 gr/dscf nor 0.4 lb/T ADP. Note, IDAPA 58.01.01.823 limits PM emissions from

smelt-dissolving-tanks to 0.5 lb/T of ADP. Since the permit is more stringent, the state rule is not included as a separate permit condition.

#### 5.4.3.1 Compliance Demonstration Method

EPA guidance on periodic monitoring states: "...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device." EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall conduct periodic inspections of visible emissions from this equipment. An O&M manual shall be developed to include, at a minimum, a general description of the equipment; normal operating conditions and procedures; startup, shutdown, and maintenance procedures; upset conditions guidelines; and the corrective action procedures.

The permittee shall also conduct periodic PM source tests as described below.

#### 5.4.3.2 Monitoring

The permittee shall conduct monthly one-minute observations of the smelt-dissolving-tank stack affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs. If four consecutive readings indicate that opacity is below 20%, the frequency of observations decreases to once per quarter. If any quarterly Method 9 observation indicates opacity is greater than 20%, observation frequency reverts to monthly.

#### 5.4.3.3 Testing

The permittee shall conduct a PM performance test on the smelt-dissolving-tank stack at the maximum expected production rate in accordance with the procedures in 40 CFR Part 60, Appendix A, Method 5. The tests shall be conducted during the first three months of the permit term to demonstrate compliance with Permit Condition 5.3. If the emissions measured in the initial test are less than 50% of the emission limit, no further testing shall be required during the life of the permit. If the emissions measured in the initial test are between 50% and 80% of the standard, a second test shall be required in the third year of the permit term. If the initial test exceeds 80% of the standard, an annual test shall be required.

#### 5.4.3.4 Recordkeeping

The results of each observation shall be recorded and maintained as required in Permit Condition 1.11 and shall include, but not limited to, the following information:

- Date of observation
- Time of observation
- Equipment/emission point observed
- Weather conditions during observation
- Results of visible emissions observations

#### 5.4.3.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.4.4 Permit Requirement – PM from Smelt-dissolving Tank (40 CFR 63, Subpart MM)

40 CFR 63.862(a)(1)(i)(B) requires that after March 13, 2004, PM emissions from the smelt-dissolving tank shall not exceed 0.2 lb/T of black liquor solids fired.

- 5.4.4.1 After March 13, 2004, the permittee shall comply with the applicable monitoring, performance testing, recordkeeping, and reporting requirements in 40 CFR 63.864 to 63.867.

#### 5.4.5 Permit Requirement – Visible Emissions from Smelt Tank (IDAPA 58.01.01.625)

The visible emissions limitations in IDAPA 58.01.01.625 state: "...a person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625." The recovery furnace is exempt from this requirement.

##### 5.4.5.1 Compliance Demonstration Method

Compliance shall be demonstrated by periodic visible emissions observations for the smelt-dissolving-tank as set forth in Section 5.4.3.

#### 5.4.6 Permit Requirement – Visible Emissions from Recovery Furnace (IDAPA 58.01.01.625.02)

IDAPA 58.01.01.625.02 requires that visible emissions from the kraft process recovery furnaces shall not exceed 40% opacity for more than three minutes in any 60-minute period.

##### 5.4.6.1 Compliance Demonstration Method

Compliance shall be demonstrated by continuous opacity monitoring as set forth in Permit Conditions 5.4.1.2, 5.4.1.4, and 5.4.1.5.

### 5.5 EMISSION UNIT GROUP 5 – NO. 5 RECOVERY BOILER

Emissions Unit Group 5 consists of the following systems, emission units, and related emission control equipment:

Table 5.5A Emission Unit Description and Emission Control Devices

Emission Point ID	Emissions Units	Emission Control Device
721	Gotaverken Energy Systems recovery boiler, rated at 90 T/hr black liquor solids (BLS) started up June 1987	Electrostatic precipitator rated at 99.7% efficiency

The following stack parameters were provided in the application:

**Table 5.5B No. 5 Recovery Boiler Stack Parameters**

<b>Stack ID</b>	<b>721</b>
Stack height (ft)	350
Stack diameter (ft)	9
Flow rate (acfm)	330,000
Temperature (°F)	350

#### **5.5.1 Permit Requirement – PM Emission Limits**

The state of Idaho construction permit letter, dated May 6, 1983, establishes the following PM limits: 58 lb/hr and 0.03 gr/dscf.

The NSPS for kraft pulp mills (40 CFR 60, Subpart BB) and the NESHAP for kraft pulp mill combustion sources (40 CFR 63, Subpart MM), effective for existing sources on March 14, 2004, require that PM from the No. 5 recovery boiler not exceed 0.044 gr/dscf corrected to 8% oxygen.

IDAPA 58.01.01.821 limits PM emissions from recovery boilers to 4 lb/T of equivalent ADP.

##### **5.5.1.1 Compliance Demonstration Method**

EPA guidance on periodic monitoring states: *"...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device."* The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

Compliance with the above emission limits shall be demonstrated by continuous opacity monitoring on the recovery boiler stack and by periodic performance testing on the schedule set forth below.

After March 13, 2004, the permittee shall comply with the applicable monitoring, performance testing, recordkeeping, and reporting requirements in 40 CFR 63.864 to 63.867.

##### **5.5.1.2 Monitoring**

Continuous monitoring and recording systems meeting the specification requirements at 40 CFR 60.284(a) shall be installed to monitor opacity.

##### **5.5.1.3 Testing**

The permittee shall conduct a PM performance test on the No. 5 recovery boiler at the maximum expected production rate in accordance with the procedures in 40 CFR Part 60, Appendix A, Method 5. The tests shall be conducted during the first three months of the permit term to demonstrate compliance with Permit Conditions 6.1, 6.2, and 6.3. If the emissions measured in the initial test are less than 50% of the emission limit, no further testing shall be required during the life of the permit. If the emissions measured in the initial test are between 50% and 80% of the standard, a second test shall be required in the third year of the permit term. If the initial test exceeds 80% of the standard, an annual test shall be required.

#### 5.5.1.4 Recordkeeping

Records of the continuous opacity monitoring and the periodic performance tests shall be maintained in accordance with Permit Condition 1.11.

#### 5.5.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.5.2 Permit Requirement – Opacity (40 CFR 60, Subpart BB)

40 CFR 60.282(a)(1)(ii) requires that the opacity from the No. 5 recovery boiler shall not exceed 35%. Emissions in excess of this limitation are not considered a violation provided the conditions in 40 CFR 60.284(e) are met.

##### 5.5.2.1 Compliance Demonstration Method

Compliance shall be demonstrated by continuously monitoring and recording the opacity in the recovery boiler stack.

##### 5.5.2.2 Monitoring

A continuous monitoring and recording system meeting the requirements of 40 CFR 60.284(a) shall be installed to monitor and record opacity.

##### 5.5.2.3 Testing

There is no testing to determine compliance with this requirement.

##### 5.5.2.4 Recordkeeping

Records of the continuous opacity monitoring shall be maintained in accordance with Permit Condition 1.11.

##### 5.5.2.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.5.3 Permit Requirement – SO<sub>2</sub>, CO, and NO<sub>x</sub> Emission Limits [PSD permit X-84-01]

The EPA PSD construction approval PSD-X84-01, dated December 4, 1984, and revised October 20, 1994, establishes the following emission limits for the No. 5 recovery boiler.

**EMISSION LIMITATIONS<sup>1</sup>**

Pollutant	Pounds Per Hour	Tons Per Year	Parts Per Million
SO <sub>2</sub>	112	490	50
CO	880	3850	900
NO <sub>x</sub>	160	700	100

<sup>1</sup>The concentration limitations are on a dry basis at 8% oxygen. The SO<sub>2</sub> and CO concentrations and hourly mass emission limitations represent the average over each 24-hour day. The NO<sub>x</sub> limits shall be demonstrated by periodic permanence testing on the schedule set forth below.



#### 5.5.3.1 Compliance Demonstration Method

Compliance shall be demonstrated for the SO<sub>2</sub> and CO limits through continuous emission monitoring. Compliance for the NO<sub>x</sub> limits shall be demonstrated by periodic performance testing on the schedule set forth below.

#### 5.5.3.2 Monitoring

A continuous monitoring and recording system meeting the specification requirements in Appendix B of 40 CFR Part 60 shall be installed to monitor and record SO<sub>2</sub>, CO, and oxygen.

#### 5.5.3.3 Testing

The permittee shall conduct a NO<sub>x</sub> performance test on the No. 5 recovery boiler at the maximum expected production rate in accordance with the procedures in 40 CFR Part 60, Appendix A, Method 7. The tests shall be conducted during the first 3 months of the permit term to demonstrate compliance with Permit Conditions 6.7. If the emissions measured in the initial test are less than 50% of all emission limits, no further testing shall be required during the life of the permit. If the emissions measured in the initial test are between 50% and 80% of any standard, a second test shall be required in the third year of the permit term. If the initial test exceeds 80% of any standard, an annual test shall be required.

#### 5.5.3.4 Recordkeeping

Records of the continuous emission monitoring and the periodic performance testing shall be maintained in accordance with Permit Condition 1.11.

#### 5.5.3.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.5.4 Permit Requirement – TRS Emission Limits

40 CFR 60.283(a)(2) requires TRS emissions from the No. 5 recovery boiler shall not exceed 5 ppm by volume on a dry basis corrected to 8% oxygen. Emissions in excess of this limitation are not considered a violation provided the conditions in 40 CFR 60.284(e) are met. IDAPA 58.01.01.819 requires that TRS emissions from the No. 5 recovery boiler shall not exceed 0.5 lb of sulfur per equivalent ton of ADP.

##### 5.5.4.1 Compliance Demonstration Method

Compliance shall be demonstrated through continuous emission monitoring.

##### 5.5.4.2 Monitoring

Continuous monitoring systems meeting the specification requirements at 40 CFR 60.284(a) shall be installed to monitor TRS concentration and percent oxygen.

##### 5.5.4.3 Testing

There is no testing to satisfy this requirement.

##### 5.5.4.4 Recordkeeping

Records of the continuous monitoring shall be maintained in accordance with Permit Condition 1.11.

#### 5.5.4.5 Reporting

The permittee shall record and report all 12-hour averages of TRS concentrations above 5 ppm by volume.

If the total duration of excess emission for the reporting period is less than 1% of the total operating time of the recovery furnace and the monitor downtime is less than 5% of the total operating time, then only a Summary Report Form, as described in 40 CFR 60.7, Figure 1, need be submitted.

If the total duration of excess emissions for the reporting period is 1% or greater of the total operating time of the recovery furnace or the monitor downtime is 5% or greater of the total operating time, then the Summary Report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

### 5.6 EMISSION UNIT GROUP 6 – NO. 5 SMELT DISSOLVING TANK

Emissions Unit Group 6 consists of the following systems, emission units, and related emission control equipment:

**Table 5.6A Emission Unit Description and Emission Control Devices**

Emission Point ID	Emissions Units	Emission Control Device
204	Gotaverken Energy Systems tank, started up June 1987	High-efficiency wet scrubber

The following stack parameters were provided in the application:

**Table 5.6B No. 5 Smelt-dissolving Tank Stack Parameters**

Stack ID	204
Stack height (ft)	208
Stack diameter (ft)	5.2
Flow rate (acfm)	26,500
Temperature (°F)	170

#### 5.6.1 Permit Requirement – PM Emission Limits

The state of Idaho construction permit letter, dated May 6, 1983, establishes the following PM limits for the smelt tank: 10.4 lb/hr and 45 T/yr.

The NSPS for kraft pulp mills (40 CFR 60, Subpart BB) and the NESHAP for kraft pulp mill combustion sources (40 CFR 63, Subpart MM), effective for existing sources on March 14, 2004, require that PM from the smelt tank not exceed 0.2 lb/T black liquor solids on a dry basis.

IDAPA 58.01.01.824 limits PM emissions from smelt-dissolving-tanks to 0.5 lb/T ADP.

##### 5.6.1.1 Compliance Demonstration Method

Before March 14, 2004, compliance shall be demonstrated by control device parameter monitoring as set forth below. After March 14, 2004, compliance shall be demonstrated compliance with all the applicable monitoring, performance testing, recordkeeping, and reporting in 40 CFR 63.864 to 63.867.

#### 5.6.1.2 Monitoring

Within 120 days of issuance of this permit, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 63.8(c), as well as the following:

- (i) The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of  $\pm 2$  inches of water gage pressure.
- (ii) The monitoring device used for continuous measurement of the scrubbing-liquid flow rate must be certified by the manufacturer to be accurate within  $\pm 5\%$  of the design scrubbing-liquid flow rate.

The permittee shall establish appropriate operating ranges for these measured parameters.

#### 5.6.1.3 Testing

Before March 14, 2004, there is no testing to satisfy these requirements.

#### 5.6.1.4 Recordkeeping

Records of the required monitoring shall be maintained in accordance with Permit Condition 1.11.

#### 5.6.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.6.2 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)

The visible emissions limitations in IDAPA 58.01.01.625 state: *"...a person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625."*

##### 5.6.2.1 Compliance Demonstration Method

An observer shall conduct an inspection of emissions from each vent or stack in this emission unit.

##### 5.6.2.2 Monitoring

The permittee shall conduct monthly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs. If four consecutive readings indicate that opacity is below 20%, the frequency of observations decreases to once per quarter. If any quarterly Method 9 observation indicates opacity is greater than 20%, observation frequency reverts to monthly.

##### 5.6.2.3 Testing

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

#### 5.6.2.4 Recordkeeping

The permittee will record the results of the observer's inspection of visible emissions and provide documentation in records according to the content and format listed below:

- Date of observation
- Time of observation
- Equipment / emission point observed
- Results of visible emissions tests

The permittee must record the results of each visible emissions evaluation performed according to the standard requirements for recordkeeping of monitoring information. The record must be maintained in accordance with Permit Condition 1.11.

#### 5.6.2.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report.

### 5.7 EMISSION UNIT GROUP 7 – NOS. 4 AND 5 RECOVERY BOILERS SALTCAKE SYSTEMS

Emissions Unit Group 7 consists of the following systems, emission units, and related emission control equipment:

Table 5.7 Emission Unit Description and Emission Control Devices

Emission Point ID	Emissions Units	Emission Control Device
NA	Nos. 4 and 5 salt cake day silos	Baghouses

No stack parameters were provided in the application for this source.

#### 5.7.1 Permit Requirement – PM Emission Limits (PTC No. 069-00001, 1/29/97)

PTC No. 069-00001, dated January 29, 1997, requires that PM and PM<sub>10</sub> emissions from the No. 4 and No. 5 recovery boiler salt-cake-system baghouse stacks shall not exceed 1.0 lb/hr and 2.0 T/yr for the No. 4 recovery boiler salt-cake system and 2.0 lb/h and 5.1 T/yr for the No. 5 recovery boiler salt-cake system.

##### 5.7.1.1 Compliance Demonstration Method

Compliance shall be demonstrated through compliance with the following operating requirements as set forth in PTC No. 069-00001 dated 1/29/97:

The maximum salt-cake throughput of the No. 4 recovery boiler salt-cake system shall not exceed 546 T/mo, or 4,250 T/yr.

The maximum salt-cake throughput of the No. 5 recovery boiler salt-cake system shall not exceed 1,650 tons per month, or 12,750 tons per year.

Emissions of PM from the No. 4 and No. 5 recovery boiler salt-cake systems shall each be controlled using an Ultra Industries baghouse (Model BB-16100-AAR-IIIG) or equivalent, with a minimum control efficiency of 99.96%.

Each salt-cake system baghouse shall be installed, operated, and maintained in accordance with manufacturer recommendations, with the exception of the pressure drop. Each salt-cake system baghouse shall be installed, operated and maintained in accordance with the O&M manual specified below, including the pressure drop, in order to determine compliance with the control efficiencies listed above. All manufacturer's specifications and operating and installation instructions shall be kept onsite for as long as each baghouse is used, and shall be made available to DEQ representatives upon request.

The permittee shall have developed an O&M manual for the air pollution control devices. The O&M manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

#### 5.7.1.2 Monitoring

The permittee shall monitor and record monthly, the amount of salt cake fed to the No. 4 recovery boiler day silo and the No. 5 recovery boiler day silo in tons in order to determine compliance with the above throughput limits. All records shall remain onsite for a minimum of five years and shall be made available to DEQ representatives upon request.

The permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the pressure drop across each salt-cake system baghouse. The pressure-monitoring devices shall be certified by the manufacturer to be accurate within one inch of water gauge pressure, and shall be calibrated on an annual basis in accordance with manufacturer instructions. At a minimum of once per day, the pressure drops shall be recorded while each recovery boiler salt-cake system is operating at normal capacity. All records shall remain onsite for a minimum five-year period and shall be made available to DEQ representatives upon request.

#### 5.7.1.3 Testing

There is no testing to determine compliance with these requirements.

#### 5.7.1.4 Recordkeeping

Records of the required monitoring shall be maintained in accordance with Permit Condition 1.11.

#### 5.7.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

### 5.8 EMISSION UNIT GROUP 8 – LIME KILNS No. 3 AND No. 4

Emissions Unit Group 8 consists of the following systems, emission units, and related emission control equipment:

**Table 5.8A Emission Unit Description and Emission Control Devices**

Emission Point ID	Emissions Units	Emission Control Device
511	No. 3 lime kiln, natural gas, oil and coke-fired	Electrostatic precipitator
512	No. 4 lime kiln, natural gas, oil, coke-fired	Electrostatic precipitator Packed-bed scrubber

The following stack parameters were provided in the application:

Table 5.8B Lime kilns Nos. 3 and 4 Stack Parameters		
Stack ID	511	512
Stack height (ft)	85	75
Stack diameter (ft)	5.5	5.5
Flow rate (acfm)	25,500	30,000
Temperature (°F)	150	160

#### 5.8.1 Permit Requirement – PM Emission Limits

PTC No. 069-00001, dated June 24, 2002, sets forth the following emission limits for Lime Kilns No. 3 and No. 4:

- PM/PM<sub>10</sub>: 5.2 lb/hr (each) and 34 T/yr (total)
- PM: 1 lb/T of equivalent ADP

The NESHAP for kraft pulp mill combustion sources (40 CFR 63, Subpart MM), effective for existing sources on March 14, 2004, requires that PM emissions from lime kiln stacks shall not exceed 0.064 gr/dscf corrected to 10% oxygen.

##### 5.8.1.1 Compliance Demonstration Method

Compliance with the PTC requirements shall be demonstrated by continuous opacity monitoring, periodic performance testing on the schedule set forth below, and compliance with the following operating requirements:

- The maximum hourly throughput of CaO for lime kilns shall not exceed 9.6 T/hr each, based on a 12-hour average. The maximum annual combined throughput of CaO to the No. 3 lime kiln and the No. 4 lime kiln shall not exceed 126,217 T/yr.
- The permittee shall install, maintain, and operate, in accordance with manufacturer specifications, an ESP on the No. 3 and No. 4 lime kiln stacks to control PM emissions.
- The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer specifications, monitoring equipment to continuously measure the voltage and amperage applied by each T/R set to the discharge electrodes and each ESP field.
- The permittee shall have developed an O&M manual for the ESPs that describes the procedures that will be followed to comply with manufacturer operating specifications and requirements.
- The O&M manual shall also include procedures to ensure and demonstrate that all emissions resulting from the treatment of NCGs routed to the No. 4 lime kiln are routed to the scrubber, and the scrubber is functioning at its rated control efficiency when emissions reach the scrubber. The manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

After March 13, 2004, the permittee shall comply with the applicable monitoring, performance testing, recordkeeping, and reporting requirements in 40 CFR 63.864 to 63.867.

#### 5.8.1.2 Monitoring

The permittee shall install, calibrate, maintain, and operate COMS on the lime kiln stacks. Except for COMS breakdowns, repairs, maintenance, calibration checks, and zero and span adjustments, the COMS shall be in continuous operation whenever the lime kilns are in operation. The installation and performance evaluation of the COMS shall be conducted in accordance with the applicable performance specification in 40 CFR 60, Appendix B.

The permittee shall have developed and submitted to DEQ for approval a COMS testing and QA plan. The plan shall demonstrate that the COMS are functioning properly and accurately represent opacity in the kiln effluent. The plan shall include, but not be limited to, the following:

- Detailed descriptions of the sampling and analytical procedures that will be used for the testing.
- Data quality objectives that clearly describe the purpose of the testing and the criteria used to evaluate the COMS performance.
- Proposed QA and QC measures used and a detailed description of such measures.
- Provisions for periodic plan review and updates.

The permittee shall monitor and record the voltage and amperage applied by each T/R set to the discharge electrodes hourly. The voltage and amperage recorded shall be consistent with the manufacturer and O&M manual units of measure. A compilation of the most recent five years of voltage and amperage records shall be kept onsite and shall be made available to DEQ representatives upon request.

The permittee shall monitor and record the hourly throughput of CaO to the lime kilns, based on a 3-hour average, 12-hour average, 24-hour (daily) average, and the annual throughput of CaO to the lime kilns, based on a 12-month rolling average. A compilation of the most recent five years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

#### 5.8.1.3 Testing

Periodic performance testing for PM and PM<sub>10</sub> emissions from the lime kiln stacks shall be accomplished by the permittee. Emissions of PM and PM<sub>10</sub> shall be measured using EPA Test Methods 5, 201a, and 202 contained in 40 CFR Part 60, Appendix A, or comparable and equivalent methods approved in accordance with IDAPA 58.01.01.157. If the PM or PM<sub>10</sub> measured in the most recent performance test is less than or equal to 75% of any respective particulate standard listed in Permit Condition 9.1 or 9.5, then the permittee shall conduct periodic performance tests every three calendar years beginning within three calendar years from the most recent test date. If the PM or PM<sub>10</sub> measured in the most recent performance test is greater than 75% of any respective particulate standard listed in Permit Condition 9.1 or 9.5, then the permittee shall conduct periodic performance tests annually beginning within 12-months from the most recent test date. Annual performance tests shall be separated by a minimum of six months.

#### 5.8.1.4 Recordkeeping

Records of the required monitoring and testing shall be maintained in accordance with Permit Condition 1.11.

#### 5.8.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

The permittee shall submit test protocols for the PM and COMS QA performance tests required in Permit Conditions 9.15 and 9.16 to DEQ for approval at least 30 days prior to the test date(s).

The permittee shall submit a report of the results of the PM and COMS QA performance tests required in Permit Conditions 9.15 and 9.16, including all required process data, to DEQ within 30 days after the date on which the performance test is concluded.

## 5.8.2 Permit Requirement – SO<sub>2</sub>, NO<sub>x</sub>, CO, and TRS Emission Limits

PTC No. 069-00001, dated June 24, 2002, sets forth the following emission limits:

- Emissions of SO<sub>2</sub>, NO<sub>x</sub>, and CO and TRS from the Allis (Svedala) No. 3 and No. 4 lime kiln stacks shall not exceed any corresponding emission rate limits in the following table.

**Emission Limits<sup>a</sup> - Hourly (lb/hr) and Annual<sup>b</sup> (T/yr)**

SOURCE DESCRIPTION	PM		PM <sub>10</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		TRS
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/day	T/yr	lb/12 hr	T/yr	T/yr
No. 3 lime kiln	5.2	34 <sup>c</sup>	5.2	34 <sup>c</sup>	153	21	766	194 <sup>c</sup>	80.4	44 <sup>c</sup>	12.6 <sup>c</sup>
No. 4 lime kiln	5.2	34 <sup>c</sup>	5.2	34 <sup>c</sup>	10.4	15	766	194 <sup>c</sup>	80.4	44 <sup>c</sup>	12.6 <sup>c</sup>

<sup>a</sup>As determined by a pollutant-specific EPA reference method, or DEQ-approved alternative, or as determined by DEQ's emission estimation methods used in this permit analysis.

<sup>b</sup>As determined by multiplying the actual or allowable (if actual is not available) lb/hr emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

<sup>c</sup>T/yr limit is for combined emissions from the No. 3 and No. 4 lime kilns.

- The concentration of TRS compounds in the effluent shall not exceed 40 ppmv from the No. 3 lime kiln on a dry basis corrected to 10% oxygen (O<sub>2</sub>), as a monthly average and 50 ppmv from the No. 4 lime kiln.
- The SO<sub>2</sub> concentrations in the effluent of the No. 4 lime kiln stack shall not exceed 20 ppmv at any time.

### 5.8.2.1 Compliance Demonstration Method

Compliance shall be demonstrated by continuous emission monitoring and compliance with the following operating requirements:

The maximum hourly throughput of CaO for lime kilns shall not exceed 9.6 T/hr each, based on a 12-hour average. The maximum annual combined throughput of CaO to the No. 3 lime kiln and the No. 4 lime kiln shall not exceed 126,217 T/yr.

- NCGs shall be treated in the following manner:
  - Noncondensable gases shall not be routed through or processed by the No. 3 lime kiln, except during periods when both the NCG incinerator and the No. 4 lime kiln are not operational due to maintenance, repair, upset, or breakdown.
  - When conditions as those specified above necessitate that NCGs be routed to the No. 4 lime kiln, the permittee shall conduct such routing and treatment of NCGs, including operations during the period of transition between utilized NCG emission control measures, in a manner representative of effective and efficient emission control of pollutants contained in NCGs or generated by the treatment of NCGs, and in compliance with applicable provisions of 40 CFR 63, Subpart S; and IDAPA 58.01.01.815 through 826.



- The permittee shall install, maintain, and operate, in accordance with manufacturer specifications a scrubber on the No. 4 lime kiln stack to control SO<sub>2</sub> emissions from the No. 4 lime kiln. The scrubber shall be installed downstream of the ESP and shall be operated whenever NCGs are routed to the No. 4 lime kiln.
- The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer specifications, monitoring equipment to continuously measure the pH and flow rate of the solution used by the caustic scrubber.
- The sulfur content in fuel oil supplied to the Nos. 3 and 4 lime kilns shall not exceed 1.75% sulfur by weight.
- The permittee shall have developed an O&M manual for the caustic scrubber that describes the procedures that will be followed to comply with the scrubber manufacturer operating specifications and requirements.
- The O&M manual shall also include procedures to ensure and demonstrate that all emissions resulting from the treatment of NCGs routed to the No. 4 lime kiln are routed to the scrubber, and the scrubber is functioning at its rated control efficiency when emissions reach the scrubber. The manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.
- The pH and flow rate of the solution used in the caustic scrubber shall be maintained within manufacturer and O&M manual specifications. Documentation of the scrubber pressure drop and scrubber-media pH and flow rate specifications shall remain onsite at all times and shall be made available to DEQ representatives upon request.

#### 5.8.2.2 Monitoring

The permittee shall install, calibrate, maintain, and operate SO<sub>2</sub> and NO<sub>x</sub> CEMS on the lime kiln stacks. The CEMS shall provide measurements on a dry ppm basis. Except for CEMS breakdowns, repairs, maintenance, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation whenever the lime kilns are in operation. The installation and performance evaluation of the CEMS shall be conducted in accordance with PS 2, as applicable, in 40 CFR 60, Appendix B. The CEMS, in combination with continuous flow measurements required by Permit Condition 9.24, shall be capable of determining compliance with the limits of Permit Condition 9.1 and shall be operated in accordance with the requirements in 40 CFR 60, Appendix E. The CEMS, in combination with the exhaust gas flow rate and emission rate calculations required by Permit Conditions 9.25 and 9.26, shall be capable of determining compliance with the NO<sub>x</sub> limit of Permit Condition 9.1 and shall be able to achieve RA requirements as specified under PS6. The exhaust flow rate equation shall be reviewed and updated if the permittee fails to achieve the minimum PS6 RA.

The permittee shall install, calibrate, maintain, and operate a TRS CEMS on the lime kiln stacks. Except for TRS CEMS breakdowns, repairs, maintenance, calibration checks, and zero and span adjustments, the TRS CEMS shall be in continuous operation whenever the lime kilns are in operation. The installation and performance evaluation of the CEMS shall be conducted in accordance with PS 5 in 40 CFR 60, Appendix B. The CEMS shall be capable of determining compliance with the TRS limit of Permit Conditions 9.1 or 9.2 and shall be operated in accordance with the requirements in 40 CFR 60, Appendix F. A CGA may be substituted for the annual RAA requirement.

The permittee shall continuously monitor and record the temperature and oxygen concentration on a dry basis from the lime kiln emission stacks.

#### Exhaust Gas Flow Rate Determination

The permittee shall calculate the 3-hour average and daily (24-hr) average exhaust-gas volumetric flow rate from the lime kiln stacks, not corrected for oxygen, using the following equations:

$$Q_s = (F_d a + 13750b)(20.9/20.9 - c)$$

Where:  $Q_s$  = Lime kiln exhaust gas volumetric flow rate (dscf)  
 $F_d$  = F factor (dry basis) for fuel combusted as calculated using procedures in 40 CFR 60, Appendix A, Method 19 or as provide in Method 19, Table 19-1.  
 $a$  = Lime kiln fuel heat input (MMBtu/averaging period) calculated from fuel use rate ( $R_f$ ) and fuel higher heating value (HHV) as follows:

$$a = R_f (\text{units/hr}) \times \text{HHV (MMBtu/unit)}$$

Fuel HHVs will be obtained from the fuel suppliers or determined through ultimate analysis. Fuel HHVs will be reviewed and updated (if necessary) at least annually.

$b$  = Lime kiln production rate (tons CaO/averaging period)  
 $c$  = oxygen% (dry basis) in lime kiln exhaust gas

The accuracy of the calculation method shall be verified during CEM initial performance evaluations and at least annually during the CEMS performance evaluations required above.

The permittee shall monitor and record the scrubber-media flow rate and pH hourly when the scrubber is in operation. A compilation of the most recent five years of pressure drop, flow rate, and pH records shall be kept onsite and shall be made available to DEQ representatives upon request.

When NCGs are treated by either lime kiln, the permittee shall monitor and record the date, time, and duration of treatment. The records shall also include an explanation why the NCG incinerator was not used to treat NCGs. A compilation of the most recent five years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

#### 5.8.2.3 Testing

There is no testing needed to ensure compliance with these requirements.

#### 5.8.2.4 Recordkeeping

The permittee shall have developed and submitted to DEQ for approval a CEMS testing and QA plan. The plan shall demonstrate that the  $\text{NO}_x$ ,  $\text{SO}_2$ , and TRS CEMS are functioning properly and accurately represent pollutant concentrations in the kiln effluent. The plan shall include, but not be limited to, the following:

- Detailed descriptions of the sampling and analytical procedures that will be used for the testing.
- Data quality objectives that clearly describe the purpose of the testing and the criteria used to evaluate the CEMS performance.
- Proposed QA and QC measures used and a detailed description of such measures
- Provisions for periodic plan review and updates.

The permittee shall calculate the 3-hour average and 12-month rolling actual  $\text{SO}_2$  emission rates, the daily average and 12-month rolling actual  $\text{NO}_x$  emission rates, and the 12-month rolling actual TRS emission rate from the lime kiln using the average concentrations obtained from the CEMS and the calculated exhaust gas flow rate required in Section 5.8.2.2 as follows:

$$E_{hr} = C_s Q_s \text{ and } E_{yr} = E_{hr} t$$

Where:  $E_{hr}$  = lb/hr mass emission rate for specified time averaging period.  
 $E_{yr}$  = ton/yr mass emission rate (12-month rolling)

$Q_s$  = dscf/hr flow rate as calculated under Permit Condition 9.25 for the specified time averaging period.

$C_s$  = lb/dscf stack gas concentration for specified time averaging period determined as follows:

$$C_{SO_2} = (\text{ppm}_d \text{ SO}_2)(1.660 \times 10^{-7})$$

$$C_{NO_x} = (\text{ppm}_d \text{ NO}_x)(1.194 \times 10^{-7})$$

$$C_{TRS} = (\text{ppm}_d \text{ TRS})(8.806 \times 10^{-6})$$

$t$  = applicable pollutant time averaging period ( $\text{SO}_2 = 3\text{-hr}$ ,  $\text{NO}_x = 24\text{-hr}$ )

The permittee shall submit a semiannual CEMS report to DEQ that contains, but is not limited to, the following:

- Calculated or measured emission rates for all applicable averaging periods for  $\text{NO}_x$ ,  $\text{SO}_2$ , and TRS. Emission rates shall be calculated using CEMS data and calculated stack flow measurements. These records may be provided in electronic format.
- Identification of any monitoring results that indicate an exceedance of applicable requirements of this permit; 40 CFR 63, Subpart S; or IDAPA 58.01.01.

### 5.8.3 Permit Requirement – Opacity

PTC No. 069-00001, dated June 24, 2002, requires that emissions shall not exceed 25% opacity from the No. 3 lime kiln stack and 20% from the No. 5 lime kiln stack for a period or periods aggregating more than three minutes in any 60-minute period.

#### 5.8.3.1 Compliance Demonstration Method

Compliance shall be demonstrated by operating a COMS as set forth in Section 5.8.1.

### 5.9 EMISSION UNIT GROUP 9 – LIME KILN NO. 2

Emissions Unit Group 9 consists of the following systems, emission units, and related emission control equipment:

**Table 5.9A Emission Unit Description and Emission Control Devices**

Emission Point ID	Emission Units	Emission Control Device
510	No. 2 lime kiln, natural gas-fired	Venturi scrubber

The following stack parameters were provided in the application:

**Table 5.9B Lime kiln No. 2 Stack Parameters**

Stack ID	510
Stack height (ft)	100
Stack diameter (ft)	3.2
Flow rate (acfm)	9,500
Temperature (°F)	165

#### 5.9.1 Permit Requirement – PM Emission Limits

IDAPA 58.01.01.822 states that emissions of PM from the No. 2 lime kiln shall not exceed

1 lb/PM/tADP. PTC No. 069-00001 dated June 24, 2002 states that emissions of PM from the No. 2 lime kiln stack shall not exceed 0.12 gr/dscf at 10% oxygen.

The NESHAP for kraft pulp mill combustion sources (40 CFR 63, Subpart MM), effective for existing sources on March 14, 2004, requires that PM emissions from lime kilns not exceed 0.064 gr/dscf at 10% oxygen.

#### 5.9.1.1 Compliance Demonstration Method

Before March 14, 2004, compliance with the Idaho rules and PTC limit shall be demonstrated by periodic source testing as specified below and compliance with the following operating requirements:

- Material processed by the No. 2 lime kiln shall be limited to lime rock only. Lime mud shall not be processed by the No. 2 lime kiln.
- The permittee shall maintain and operate the existing scrubber on the No. 2 lime kiln stack in accordance with manufacturer specifications.
- The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer specifications, equipment to measure the liquor flow rate and the pressure drop across the scrubber.

After March 13, 2004, compliance shall be demonstrated by compliance with the applicable monitoring, performance testing, recordkeeping, and reporting requirements in 40 CFR 63.864 to 63.867.

#### 5.9.1.2 Monitoring

Each month, the permittee shall monitor and record the throughput of the No. 2 lime kiln for that month and for the most recent 12-month period. A compilation of the most recent five years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

#### 5.9.1.3 Testing

If the No. 2 lime kiln is operated more than 30 days in any quarter, PM emissions from the No. 2 lime kiln stack shall be tested. Performance testing for PM emissions from the No. 2 lime kiln stack shall be accomplished by the permittee as follows. Emissions of PM from the No. 2 lime kiln stack shall be measured using EPA Test Method 5, contained in 40 CFR Part 60, Appendix A, or such comparable and equivalent methods approved in accordance with IDAPA 58.01.01.157. If the PM measured in the most recent performance test is less than or equal to 75% of any respective particulate standard listed in Permit Conditions 10.1 or 10.2, then the permittee shall conduct periodic performance tests every three calendar years beginning within three calendar years from the most recent test date. If the PM measured in the most recent performance test is greater than 75% of any respective particulate standard listed in Permit Conditions 10.1 or 10.2, then the permittee shall conduct periodic performance tests annually beginning within 12-months from the most recent test date. Annual performance tests shall be separated by a minimum of six months.

- Visible emissions shall be observed during each performance test run using the methods specified in IDAPA 58.01.01.625.
- The scrubber solution flow rate and the pressure drop across the scrubber on the No. 2 lime kiln stack shall be recorded during each performance test.
- The throughput in tons per hour of lime rock to the No. 2 lime kiln shall be recorded during each performance test.
- The pounds of PM per ton of ADP shall be calculated based on results of the performance test, the throughput monitoring required by Permit Condition 10.10, and a production conversion factor of 3.64 tADP/tCaO.

#### 5.9.1.4 Recordkeeping

Records of required testing and monitoring shall be maintained in accordance with Permit Condition 1.11.

#### 5.9.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

The permittee shall submit a test protocol for all performance tests to DEQ for approval at least 30 days prior to the test dates.

The permittee shall submit a report of the results of all performance tests required by this permit, including all required process data, to DEQ within 30 days after the date on which the performance test is concluded.

#### 5.9.2 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)

The visible emissions limitations in IDAPA 58.01.01.625 state: "...a person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625."

##### 5.9.2.1 Compliance Demonstration Method

Compliance shall be demonstrated by periodic performance testing set forth in Section 5.9.1.3 and compliance with the operating and other requirements in Section 5.9.1.

#### 5.10 **EMISSION UNIT GROUP 10 – LIME HANDLING AND SLAKING**

Emissions Unit Group 10 consists of the following systems, emission units, and related emission control equipment:

**Table 10.1A Emission Unit Description and Emission Control Devices**

Emission Point ID	Emissions Units	Emission Control Device
43	Lime slaker	Scrubber
47	Lime handling	Baghouse

The following stack parameters were provided in the application:

**Table 10.1B Lime Handling and Slaking Stack Parameters**

Stack ID	43	47
Stack height (ft)	66.9	19
Stack diameter (ft)	1.3	2.1
Flow rate (acfm)	NA	6,000
Temperature (°F)	NA	400

### 5.10.1 Permit Requirement – PM Emission Limits

PTC 1140-00001, dated September 9, 1988, establishes the following emission limits:

- The PM and PM<sub>10</sub> emissions from the slaker scrubber stack shall not exceed 1.72 lb/hr or 7.53 T/yr.
- The PM and PM<sub>10</sub> emissions from the lime-handling baghouse stack shall not exceed 0.01 gr/acf.

#### 5.10.1.1 Compliance Demonstration Method

Compliance shall be demonstrated by periodic opacity monitoring and compliance with the following design and operating parameters:

- The lime-handling baghouse shall have a design flow of 6000 acfm at 400°F, air-to-cloth ratio of 3.9:1 with pulse-jet type cleaning.
- The slaker scrubber stack shall meet the following specifications: 66.9 ft high, 1.3 ft diameter, and exhaust velocity of 2500 ft per minute.

#### 5.10.1.2 Monitoring

The permittee shall conduct monthly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs. If four consecutive readings indicate that opacity is below 20%, the frequency of observations decreases to once per quarter. If any quarterly Method 9 observation indicates opacity is greater than 20%, observation frequency reverts to monthly.

#### 5.10.2.3 Testing

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

#### 5.10.2.4 Recordkeeping

The permittee will record the results of the observer's inspection of visible emissions and provide documentation in records according to the following content and format:

- Date of observation
- Time of observation
- Equipment / emission point observed
- Results of visible emissions tests

The permittee must record the results of each visible emissions evaluation performed according to the standard requirements for recordkeeping of monitoring information. The records must be maintained in accordance with Permit Condition 1.11.

#### 5.10.2.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report.

### 5.10.2 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)

The visible emissions limitations in IDAPA 58.01.01.625 state: "...a person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625."

#### 5.10.2.1 Compliance Demonstration Method

An observer shall conduct an inspection of emissions from each vent or stack in this emission unit.

#### 5.10.2.2 Monitoring

The permittee shall conduct monthly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs. If four consecutive readings indicate that opacity is below 20%, the frequency of observations decreases to once per quarter. If any quarterly Method 9 observation indicates opacity is greater than 20%, observation frequency reverts to monthly.

#### 5.10.2.3 Testing

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

#### 5.10.2.4 Recordkeeping

The permittee will record the results of the observer's inspection of visible emissions and provide documentation in records according to the following content and format:

- Date of observation
- Time of observation
- Equipment / emission point observed
- Results of visible emissions tests

The permittee must record the results of each visible emissions evaluation performed according to the standard requirements for recordkeeping of monitoring information. The records must be maintained in accordance with Permit Condition 1.11.

#### 5.10.2.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report.

## 5.11 EMISSION UNIT GROUP 11 – NCG INCINERATOR

Emissions Unit Group 11 consists of the following systems, emission units, and related emission control equipment:

Table 11.1A Emission Unit Description and Emission Control Devices

Emission Point ID	Emissions Units	Emission Control Device
106	Batch and continuous digesters, multiple-effect evaporator system, and brown stock washers	NCG incinerator

The following stack parameters were provided in the PTC technical memorandum:

Table 11.1B NCG Incinerator Stack Parameters

Stack ID	106
Stack height (ft)	95
Stack diameter (ft)	2.17
Flow rate (acfm)	5,408
Temperature (°F)	170

### 5.11.1 Permit Requirement – SO<sub>2</sub> Emission Limits

PTC No. 069-00001, dated August 29, 1997, requires that SO<sub>2</sub> emissions from the NCG incinerator/packed-bed absorber stack shall not exceed 4.70 lb/hr or 20.0 T/yr. The SO<sub>2</sub> emission rate limit is a three-hour rolling average pound-per-hour emission rate limit.

#### 5.11.1.1 Compliance Demonstration Method

Compliance shall be demonstrated through a continuous emission rate monitoring system.

#### 5.11.1.2 Monitoring

The permittee shall calibrate, maintain and operate a continuous emissions rate monitoring system (CERMS) to monitor and record the rate of SO<sub>2</sub> emissions to the atmosphere from the incinerator/packed-bed absorber stack. The span value for the SO<sub>2</sub> concentration monitor portion of the SO<sub>2</sub> CERMS shall be 330 ppm, or a DEQ-approved alternative value. The SO<sub>2</sub> CERMS shall be used directly for determining compliance with SO<sub>2</sub> emission rates in Permit Condition 12.1.

- The installation and performance evaluations of the SO<sub>2</sub> CERMS shall be done in accordance with 40 CFR 60, Appendix B, PS 2; and 40 CFR 60, Appendix B, PS 6.
- The quality assurance requirements specified in 40 CFR 60, Appendix F, are hereby required to be applicable to the SO<sub>2</sub> CERMS.
- The SO<sub>2</sub> CERMS shall be in continuous operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments. In addition, CERMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

#### 5.11.1.3 Testing

The permittee shall conduct an annual RA test and RATA for the SO<sub>2</sub> CERMS. The permittee shall submit a notification to DEQ in writing at least 30 days prior to the test date that states the date when the test will occur and identifies which approved protocol will be used for the test. New test protocols shall be



submitted for approval for any annual RATA after any changes are made to the process at least 30 days prior to the test date for the SO<sub>2</sub> CERMS.

#### **5.11.1.4 Recordkeeping**

The permittee shall maintain a file containing measurement data and related information for the SO<sub>2</sub> CERMS including, but not limited to, the following: all CERMS output data, copies of all performance evaluation reports, daily calibration drift check data, written quality control procedures, documentation of all adjustments and maintenance on the CERMS, and copies of all information required to be submitted to DEQ regarding the CERMS. The contents of the files shall be recorded in a permanent form suitable for inspection and shall be retained at the facility for at least five years following the date on which such data or information were recorded. Each file shall be made available to DEQ representatives upon request, and shall be used to determine when the NCGs are combusted in the incinerator.

#### **5.11.1.5 Reporting**

The reporting requirements specified in 40 CFR 60, Appendix B, PS 2, Section 9; 40 CFR 60, Appendix B, PS 5, Section 1.1; 40 CFR 60, Appendix B, PS 6, Section 1.2; and 40 CFR 60, Appendix F, Section 7 shall be submitted to DEQ within 30 days of the date on which the corresponding RA test or RATA is completed.

The permittee shall submit to DEQ excess emissions and monitoring systems performance reports and/or summary reports for the SO<sub>2</sub> CERMS. The reporting requirements and report format shall comply with 40 CFR 60.7(b) through (d) and IDAPA 58.01.01.131. Excess SO<sub>2</sub> emissions are defined as SO<sub>2</sub> emissions with a three-hour rolling average pound-per-hour value greater than the pound-per-hour emission limit in Permit Condition 12.1.

The permittee shall submit an annual report based on a calendar year listing the tons of SO<sub>2</sub> that emitted from the incinerator/scrubber stack for the year. The report is due by January 30 of each year, and may be included as part of the fourth quarter report.

#### **5.11.2 Permit Requirement – TRS Emissions**

PTC No. 069-00001, dated August 29, 1997, and 40 CFR 60.283(a)(1) require that TRS emissions from the NCG incinerator/packed-bed absorber stack shall not exceed 5 ppmv on a dry basis, corrected to 10% oxygen. The TRS emission concentration limit is a 12-hour average emission limit pursuant to 40 CFR 60.284(c).

##### **5.11.2.1 Compliance Demonstration Method**

Compliance shall be demonstrated by continuous emission rate monitoring and compliance with the following operating requirements.

- The temperature of the incinerator shall be maintained at or above 1,200°F at all times when waste gases are being supplied to the incinerator.
- The packed-bed absorber shall be installed, operated and maintained according to manufacturer recommendations. The permittee may submit an O&M manual providing alternative O&M requirements for the packed-bed absorber to DEQ for approval.
- NCGs originating from the kraft pulp mill's batch digesters, continuous digesters, multiple-effect evaporator system, and brown stock washers shall be thermally oxidized exclusively in either the incinerator or in a lime kiln.

#### 5.11.2.2 Monitoring

The permittee shall install, calibrate, maintain and operate a CEMS to monitor and record the concentration of TRS emissions, on a dry basis, and a CEMS to monitor and record the percentage of oxygen by volume, on a dry basis, in the gases discharged to the atmosphere from the incinerator/packed-bed absorber stack. The TRS CEMS and oxygen CEMS shall be used directly for determining compliance with the TRS emission concentrations in Permit Condition 12.2.

- The installation and performance evaluations of the oxygen CEMS and the TRS CEMS shall be done in accordance with 40 CFR 60, Appendix B, PS 3; and 40 CFR 60, Appendix B, PS 5, respectively.
- The quality assurance requirements specified in 40 CFR 60, Appendix F, are hereby required to be applicable to the oxygen CEMS and the TRS CEMS.
- The oxygen CEMS and the TRS CEMS shall be in continuous operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments. In addition, each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
- The permittee shall maintain a file containing measurement data and related information for the oxygen CEMS and a similar file for the TRS CEMS. The respective data and information in each file shall include, but not be limited to, the following: all CEMS output data, copies of all performance evaluation reports, daily calibration drift check data, written quality control procedures, documentation of all adjustments and maintenance on the CEMS, and copies of all information required to be submitted to DEQ regarding the CEMS. The contents of the files shall be recorded in a permanent form suitable for inspection and shall be retained at the facility for at least five years following the date on which such data or information were recorded. Each file shall be made available to DEQ representatives upon request, and shall be used to determine when NCGs are combusted in the incinerator.
- An incinerator temperature-monitoring device shall be installed, calibrated, maintained, and operated according to manufacturer specifications to continuously measure and record the temperature of the incinerator combustion chamber. The monitor shall initially be certified by the manufacturer to be accurate within 1% ( $\pm 1\%$ ) of the temperature being measured. The temperature monitoring device shall be installed at the point of incineration of the effluent gases. Continuous temperature monitoring records shall be maintained onsite for the most recent five-year period and shall be made available to DEQ representatives upon request.

#### 5.11.2.3 Testing

The permittee shall conduct an annual RA test and RATA for the oxygen and TRS CEMS. The permittee shall submit a notification to DEQ in writing, at least 30 days prior to the test date, that states the date when the test will occur and identifies which approved protocol will be used for the test. New test protocols shall be submitted for approval for any annual RATA after any changes are made to the process at least 30 days prior to the test date for the oxygen and TRS CEMS.

The reporting requirements specified in 40 CFR 60, Appendix B, PS 2, Section 9; 40 CFR 60, Appendix B, PS 5, Section 1.1; 40 CFR 60, Appendix B, PS 6, Section 1.2; and 40 CFR 60, Appendix F, Section 7 shall be submitted to DEQ within 30 days of the date on which the corresponding RA test or RATA is completed.

#### 5.11.2.4 Recordkeeping

The permittee shall calculate and record on a daily basis the 12-hour average TRS concentrations and correct these concentrations to 10% oxygen by volume as specified in 40 CFR 60.284(c). These records

shall be maintained onsite for the most recent five-year period and shall be made available to DEQ representatives upon request.

#### 5.11.2.5 Reporting

The permittee shall submit to DEQ copies of all excess emissions and monitoring systems performance reports and/or summary reports as set forth in 40 CFR 60.7(b) through (d) and IDAPA 58.01.01.131 for TRS emissions. Excess TRS emissions are defined as in 40 CFR 60.284(d)(30)(i).

### 5.12 EMISSION UNIT GROUP 12 – OXYGEN DELIGNIFICATION REACTOR

Emissions Unit Group 12 consists of the following systems, emission units, and related emission control equipment:

**Table 12.1A Emission Unit Description and Emission Control Devices**

Emission Point ID	Emission Units	Emission Control Device
766	Oxygen delignification reactor	None

The following stack parameters were provided in the application:

**Table 12.1B Oxygen Delignification Reactor Stack Parameters**

Stack ID	766
Stack height (ft)	140
Stack diameter (ft)	0.7
Flow rate (acfm)	300
Temperature (°F)	180

#### 5.12.1 Permit Requirement – CO Emission Limits

PTC No. 069-00001, dated September 16, 1996, requires that CO emissions from the oxygen delignification stall shall not exceed an average of 17.0 lb/hr based on a 24-hour averaging period, or 74.5 ton/yr.

##### 5.12.1.1 Compliance Demonstration Method

Compliance shall be demonstrated by continuous emission monitoring.

##### 5.12.1.2 Monitoring

The permittee shall install, calibrate, maintain and operate a monitor to continuously measure CO emissions for the oxygen delignification stack. Continuous emission monitoring shall meet 40 CFR 60.13(b), (d)(1), (e)(2) (f), (g), (h) and (i) requirements. Installation specifications and test procedures for the CEMS shall comply with 40 CFR 60, Appendix B, PS 4 requirements. The CEMS quality assurance procedure shall comply with 40 CFR 60, Appendix F. The CEMS shall also be maintained and operated according to the Operations and Maintenance Manual.

The permittee shall have developed an O&M manual for the CO CEMS. This manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

##### 5.12.1.3 Testing

There is no testing needed to demonstrate compliance with this requirement.

#### 5.12.1.4 Recordkeeping

Records of the required monitoring shall be maintained in accordance with Permit Condition 1.11.

#### 5.12.1.5 Reporting

The permittee shall submit, within 30 days of the end of each calendar quarter, CEMS data-reports on average hourly CO emissions based on the daily hourly average emissions, including daily high values, in pounds per hour.

The permittee shall submit, within 30 days of the end of each calendar year, a CEMS data report for CO emissions. Total year-to-date emissions shall be submitted within the report.

### 5.13 EMISSION UNIT GROUP 13 – CHLORINE DIOXIDE PLANT

Emissions Unit Group 13 consists of the following systems emission units, and related emission control equipment:

Table 13.1A Emission Unit Description and Emission Control Devices

Emission Point ID	Emission Units	Emission Control Device
69 and 67	Lurgi 134 and 234 HCl synthesis	Lurgi scrubber or Fiber Line bleach plant scrubber

The following stack parameters were provided in the application:

Table 13.1B Chlorine Dioxide Plant Stack Parameters

Stack ID	69	67
Stack height (ft)	95	95
Stack diameter (ft)	0.8	0.8
Flow rate (acfm)	550	530
Temperature (°F)	70	70

#### 5.13.1 Permit Requirement – HCl, ClO<sub>2</sub>, and Cl<sub>2</sub> Emission Limits

PTC No. 069-00001, dated September 2, 1999, requires that HCl, ClO<sub>2</sub>, and Cl<sub>2</sub> emissions shall not exceed the following emission rates:

Source Description	Cl <sub>2</sub>		ClO <sub>2</sub>		HCl	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
134 HCl synthesis	0.16	0.7	0.16	0.7	0.53	2.3
234 HCl synthesis	0.16	0.7	0.16	0.7	0.53	2.3
Lurgi Cl <sub>2</sub> scrubber	0.26	1.1	0.26	1.1	0.15	0.7

Since these limits do not derive from Clean Air Act requirements, all provisions of this section are State-only enforceable.

##### 5.13.1.1 Compliance Demonstration Method

Compliance shall be demonstrated compliance with the following operating requirements:

- The Lurgi scrubber shall operate a minimum of 95% of the Lurgi operating time.

- The auxiliary scrubber shall operate continuously while the Lurgi scrubber is undergoing maintenance or in emergency situations when needed.
- The makeup-scrubbing-media flow rate to the auxiliary scrubber shall be a minimum 50 gpm at any time that both the Fiber Line bleach plant is operating and the scrubber is being used as an auxiliary scrubber for the Lurgi plant.
- The permittee shall not conduct a planned shut-down of either synthesis unit while the auxiliary scrubbing system is operating.

#### 5.13.1.2 Monitoring

The permittee shall monitor and record the following information on a daily basis: a compilation of all monitoring data shall be kept onsite for the most recent five-year period and shall be made available to DEQ representatives upon request.

- Which scrubber is operating (Lurgi scrubber or auxiliary scrubber)
- The auxiliary scrubber-media flow rate while the auxiliary scrubber is operating in place of the Lurgi scrubber

The permittee shall have developed an O&M Manual for the Fiber Line bleach plant scrubber (auxiliary scrubber) and the Lurgi scrubber which describes the procedures that will be followed to comply with manufacturer air pollution control device specifications. This manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

#### 5.13.1.3 Testing

There is no testing needed to demonstrate compliance with this requirement.

#### 5.13.1.4 Recordkeeping

Records of all required monitoring shall be maintained in accordance with Permit Condition 1.11.

#### 5.13.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

### 5.14 EMISSION UNIT GROUP 14 – TRASH HOG

Emissions Unit Group 14 consists of the following systems, emission units, and related emission control equipment.

**Table 15.1 Emission Unit Description and Emission Control Devices**

Emission Point ID	Emission Units	Emission Control Device
	Trash hog	Cyclone

No stack parameters were provided in the application for this source.

#### 5.14.1 Permit Requirement - Process Weight - (IDAPA 58.01.01.701)

IDAPA 58.01.01.701 states that "...a person shall not discharge to the atmosphere from any source operating after October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour":

- a. If PW is less than 9,250 lb/hr,

$$E=0.045(PW)^{0.6}$$

- b. If PW is equal to or greater than 9,250 lb/hr,

$$E=1.10(PW)^{0.25}$$

A process weight rate PM emission limitation is a "moving scale" requirement. The affected emissions units must comply with an allowable PM emission limit that corresponds to the weight (including the water content) of the material being processed by the group of affected equipment.

##### 5.14.1.1 Compliance Demonstration Method

EPA guidance on periodic monitoring states: "...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device." The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

The permittee shall conduct periodic inspections of visible emissions from this equipment as set forth below. Feed to the trash hog shall not exceed 11,000 lb/hr for a total charging period not to exceed 12 hours/day. Reasonable precautions shall be taken to prevent particulates from becoming airborne including, but not limited to, good O&M of the processes and control equipment.

##### 5.14.1.2 Monitoring

The permittee shall conduct quarterly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs. Less frequent monitoring for this source is required due to the low probability of exceeding the process weight limits or opacity limits.

##### 5.14.1.3 Testing

There is no testing required to satisfy the PM requirement.

##### 5.14.1.4 Recordkeeping

The results of each observation shall be recorded and maintained as required in Permit Condition 1.11 and shall include, but not limited to, the following information:

- Date of observation
- Time of observation
- Equipment / emission point observed
- Weather conditions during observation
- Results of visible emissions observations

#### 5.14.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

#### 5.14.2 **Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)**

The visible emissions limitations in IDAPA 58.01.01.625 state: *"...a person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625."*

##### 5.14.2.1 Compliance Demonstration Method

An observer shall conduct an inspection of emissions from each vent or stack in this emission unit.

##### 5.14.2.2 Monitoring

The permittee shall conduct quarterly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs.

##### 5.14.2.3 Testing

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

##### 5.14.2.4 Recordkeeping

The permittee will record the results of the observer's inspection of visible emissions and provide documentation in records according to the content and format listed below:

- Date of observation
- Time of observation
- Equipment / emission point observed
- Results of visible emissions tests

The permittee must record the results of each visible emissions evaluation performed according to the standard requirements for recordkeeping of monitoring information. The record must be maintained in accordance with Permit Condition 1.11.

#### 5.14.2.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report.

#### 5.15 EMISSION UNIT GROUP 15 – MISCELLANEOUS PROCESS SOURCES

Emissions Unit Group 15 consists of the following systems, emission units, and related emission control equipment:

Table 15.1A Emission Unit Description and Emission Control Devices

Emission Point Identification	Emission Unit(s)/Process(es)	Emission Control Device
774, 775	Sawdust transfer cyclones	None
1L & 2L	No. 1 and No. 2 paper machines	None
513, 514	Pulp dryer	None
464, 465, 466	Dry additives handling	Baghouses (3)
432	Dry fuel bins	Baghouse

The following stack parameters were provided in the application:

Table 15.1B 1L and 2L Tissue Machine Stack Parameters

Stack ID	513	514	464, 465, 466	432
Stack height (ft)	66	66	68	NA
Stack diameter (ft)	3.5	3.5	0.8	NA
Flow rate (acfm)	35,500	35,000	NA	61,000
Temperature (°F)	370	370	70	70

##### 5.15.1 Permit Requirement - Process Weight - (IDAPA 58.01.01.701,702)

IDAPA 58.01.01.702 states that "...a person shall not discharge to the atmosphere from any source operating prior to October 1, 1979, PM in excess of the amount shown by the following equations, where *E* is the allowable emission from the entire source in pounds per hour, and *PW* is the process weight in pounds per hour":

- a. If *PW* is less than 17,000 lb/hr,

$$E=0.045(PW)^{0.6}$$

- b. If *PW* is equal to or greater than 17,000 lb/hr,

$$E=1.12(PW)^{0.27}$$

A process weight rate PM emission limitation is a "moving scale" requirement. The affected emissions units must comply with an allowable PM emission limit that corresponds to the weight (including the water content) of the material being processed by the group of affected equipment.



This is applicable to source ID numbers 774, 775, 1L & 2L , 513, 514.

IDAPA 58.01.01.701 states that person shall not person shall not discharge any air pollutant into the atmosphere from any source operating on or after October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

- a. If PW is less than 9,250 lb/hr,

$$E = 0.045(PW)^{0.6}$$

- b. If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

This is applicable to source ID numbers 464, 465, 466, and 432.

#### 5.15.1.1 Compliance Demonstration Method

EPA guidance on periodic monitoring states: "...if some level of control is necessary to comply with the standard, then the permit must either specify frequent measurement of PM and/or collection of control equipment parameters to assure proper O&M of the control device." The EPA criteria are considered for the development of adequate monitoring and recordkeeping requirements for the facility's compliance certification.

#### 5.15.1.2 Monitoring

The permittee shall conduct quarterly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs. Less frequent monitoring for this source is required due to the low probability of exceeding the process weight limits or opacity limits.

#### 5.15.1.3 Testing

There is no testing required to satisfy the PM requirement.

#### 5.15.1.4 Recordkeeping

The results of each observation shall be recorded and maintained as required in Permit Condition 1.11 and shall include, but not limited to, the following information:

- Date of observation
- Time of observation
- Equipment / emission point observed
- Weather conditions during observation
- Results of visible emissions observations

#### 5.15.1.5 Reporting

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report. A certification of the compliance status must be submitted annually.

## **5.15.2 Permit Requirement - Visible Emissions - (IDAPA 58.01.01.625)**

The visible emissions limitations in IDAPA 58.01.01.625 state: *"...a person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625."*

### **5.15.2.1 Compliance Demonstration Method**

An observer shall conduct an inspection of emissions from each vent or stack in this emission unit.

### **5.15.2.2 Monitoring**

The permittee shall conduct quarterly one-minute observations of each affected emissions point or source using EPA Method 22 (in 40 CFR Part 60, Appendix A). If visible emissions are observed from any emissions point, a six-minute observation using EPA Method 9 shall be conducted or appropriate repairs shall be completed within 24 hours. A visible emissions retest, as noted above, shall be conducted following completion of such repairs.

### **5.15.2.3 Testing**

There are no testing requirements associated with establishing compliance with IDAPA 58.01.01.625.

### **5.15.2.4 Recordkeeping**

The permittee will record the results of the observer's inspection of visible emissions and provide documentation in records according to the content and format listed below:

- Date of observation
- Time of observation
- Equipment / emission point observed
- Results of visible emissions tests

The permittee must record the results of each visible emissions evaluation performed according to the standard requirements for recordkeeping of monitoring information. The record must be maintained in accordance with Permit Condition 1.11.

### **5.15.2.5 Reporting**

The permittee must submit certified semiannual reports of all required monitoring listed above. Deviations are to be noted by the permittee and the corrective action(s) taken must be included in the semiannual report.

**5.16. EMISSION UNIT GROUP 16 – SOURCES SUBJECT TO 40 CFR PART 63, SUBPART S**

This emission unit group consists of the affected facilities subject to the NESHAP from the pulp and paper industry (40 CFR Part 63, Subpart S). The affected facilities, applicable requirements, monitoring, recordkeeping, and reporting requirements are set forth in Appendix A to the permit, and are taken directly from the provisions of Subpart S.

**6. INSIGNIFICANT ACTIVITIES**

The insignificant activities described by the source in their application, dated May 1995, are incorporated by reference.

**7. ALTERNATIVE OPERATING SCENARIOS**

If an affected facility ever exceeds the "incidental printing" thresholds in 40 CFR Part 63, Subpart KK, it becomes subject to the full requirements of Subpart KK. Although the facility currently qualifies for exemption from the Subpart KK control requirements, these requirements are identified as an alternative scenario in case the thresholds are ever exceeded.

**8. TRADING SCENARIOS**

No emissions trading were requested in the permit application.

**9. COMPLIANCE PLAN AND COMPLIANCE CERTIFICATION**

**9.1 COMPLIANCE PLAN**

**9.1.1 Non-Compliance Issues**

No current non-compliance issues were identified in the application.

**9.1.2 Compliance Certification**

The permittee is required to submit a periodic compliance certification for each emissions unit in the form of an annual report to DEQ and the EPA within 30 days after the end of each calendar year. The permittee must certify compliance with all terms and conditions of the permit including, but not limited to, throughputs, steam production, emissions calculations, visible emissions standards, and fugitive emissions in accordance with IDAPA 58.01.01.322.11.

**10. ACID RAIN PERMIT**

The Potlatch facility is not subject to the Acid Rain permitting requirements of 40 CFR 72 through 75.

# 11. AIRS DATABASE (INCLUDES IPPD FACILITY EXCEPT FOR NSPS AND MACT COLUMNS)

AIR PROGRAM	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	TITLE V	AREA CLASSIFICATION A - Attainment U - Unclassifiable N - Nonattainment
POLLUTANT							
SO <sub>2</sub>	A	A	A			A	U
NO <sub>x</sub>	A	A	A			A	U
CO	A	A				A	U
PM <sub>10</sub>	A	A				A	U
PT (Particulate)	A	A	A			A	U
VOC	A	A				A	U
THAP (Total HAPs)	NA	C			CX	A	NA
			APPLICABLE SUBPART				
			D, Dc, BB		S, MM		

Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

## AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 ton-per-year (T/yr) threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

# 12. REGISTRATION FEES

This facility is a major facility as defined by IDAPA 58.01.01.008.10 and is therefore subject to registration and registration fees in accordance with IDAPA 58.01.01.387.

# 13. RECOMMENDATION

Based on the Tier I application and review of the federal regulations and state rules, staff recommends DEQ issue final Tier I operating permit No. 069-00001 to the Pottlatch Corp. for their facility in Lewiston.

KB/DS: tk Project No. T1-9505-064-1ippd

cc: Eric Kopczynski, Lewiston Regional Office Laurie Kral, EPA - Region 10 Sherry Davis, Air Quality Division

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